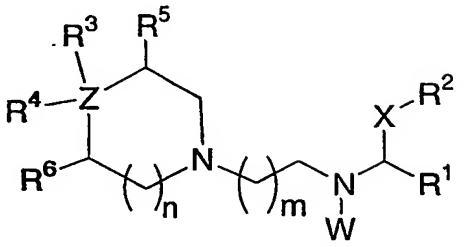
WHAT IS CLAIMED IS:

1. A compound of the formula I:



I

wherein:

X is selected from the group consisting of:

$-NR^{10}-$, $-O-$, $-CH_2O-$, $-CONR^{10}-$, $-NR^{10}CO-$, $-CO_2-$, $-OCO-$, $-CH_2(NR^{10})CO-$, $-N(COR^{10})-$, $-CH_2N(COR^{10})-$, phenyl, and C_{3-6} cycloalkyl,

where R^{10} is independently selected from: hydrogen, C_{1-6} alkyl, benzyl, phenyl, and C_{1-6} alkyl-C_{3-6} cycloalkyl,

which is unsubstituted or substituted with 1-3 substituents where the substituents are independently selected from: halo, C_{1-3}alkyl, C_{1-3}alkoxy and trifluoromethyl;

W is selected from:

hydrogen and C_{1-6} alkyl, which is unsubstituted or substituted with 1-3 substituents where the substituents are independently selected from: halo, C_{1-3}alkoxy and trifluoromethyl;

Z is selected from:

C, N, and -O-, wherein when Z is N, then R^4 is absent, and when W is -O-, then both R^3 and R^4 are absent;

n is an integer selected from 0, 1, 2, 3 and 4;

n is an integer selected from 1, 2, 3 and 4;

R^1 is selected from:

hydrogen, -C_{0-6}alkyl-, -(C_{0-6}alkyl)-alkenyl-,
-(C_{0-6}alkyl)-C_{3-6}cycloalkyl, -(C_{0-6}alkyl)-phenyl,
and -(C_{0-6}alkyl)-heterocycle,

where the alkyl is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:

(a) halo,
(b) hydroxy,
(c) -O-C_{1-3}alkyl,
(d) trifluoromethyl, and
(e) -C_{1-3}alkyl,

and where the phenyl and the heterocycle is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:

(a) halo,
(b) hydroxy; alkoxy
(c) amino; acylamino;sulfonylamino; alkoxycarbonylamino
(d) carboxylic acid; carbamide; sulfonamide

or wherein W and R^1 may be joined together to form a ring by a group selected from:
-(C_{1-6}alkyl)-, -C_{0-6}alkyl-Y-(C_{1-6}alkyl)-, and
-(C_{0-6}alkyl)-Y-(C_{0-6}alkyl)-(C_{3-7}cycloalkyl)-(C_{0-6}alkyl),

where Y is selected from:
a single bond, -O-, -S-, -SO-, -SO_2-, and -NR^{10}-,

and where the alkyl and the cycloalkyl are unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:

(a) halo,
(b) hydroxy,
(c) -O-C_{1-3}alkyl, and
(d) trifluoromethyl,
(e) C_{1-3}alkyl,
(f) -O-C_{1-3}alkyl,
(g) -CO_2R^9, wherein R^9 is independently selected from: hydrogen, C_{1-6} alkyl, C_{5-6} cycloalkyl, benzyl or phenyl, which is unsubstituted or

substituted with 1-3 substituents where the substituents are independently selected from: halo, C_{1-3}alkyl, C_{1-3}alkoxy and trifluoromethyl,

(h) -CN,
(i) $-NR^9R^{10}$,
(j) $-NR^9COR^{10}$,
(k) $-NR^9SO_2R^{10}$, and
(l) $-CONR^9R^{10}$;

R^2 is selected from:

$(C_{0-6}$alkyl)-phenyl and $(C_{0-6}$alkyl)-heterocycle,

where the alkyl is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:

(a) halo,
(b) hydroxy,
(c) $-O-C_{1-3}$alkyl,
(d) trifluoromethyl, and
(e) $-C_{1-3}$alkyl,

and where the phenyl and the heterocycle is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:

(a) halo,
(b) trifluoromethyl,
(c) trifluoromethoxy,
(d) hydroxy,
(e) C_{1-6}alkyl,
(f) C_{3-7}cycloalkyl,
(g) $-O-C_{1-6}$alkyl,
(h) $-O-C_{3-7}$cycloalkyl,
(i) $-SCF_3$,
(j) $-S-C_{1-6}$alkyl,
(k) $-SO_2-C_{1-6}$alkyl,
(l) phenyl,
(m) heterocycle,
(n) $-CO_2R^9$,
(o) -CN,

(p) -NR^9R^{10},
(q) -NR^9-SO_2-R^{10},
(r) -SO_2-NR^9R^{10}, and
(s) -$CONR^9R^{10}$;

R^3 is -(C_{0-6}alkyl)-phenyl,

where the alkyl is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:

(a) halo,
(b) hydroxy,
(c) -O-C_{1-3}alkyl, and
(d) trifluoromethyl,

and where the phenyl is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:

(a) halo,
(b) trifluoromethyl,
(c) hydroxy,
(d) C_{1-3}alkyl,
(e) -O-C_{1-3}alkyl,
(f) -CO_2R^9,
(g) -CN,
(h) -NR^9R^{10}, and
(i) -$CONR^9R^{10}$;

R^4 is selected from:

(a) hydrogen,
(b) hydroxy,
(c) C_{1-6}alkyl,
(d) C_{1-6}alkyl-hydroxy,
(e) -O-C_{1-3}alkyl,
(f) -CO_2R^9,
(g) -$CONR^9R^{10}$, and
(h) -CN;

or where R^3 and R^4 may be joined together to form a ring which is selected from:

(a) 1H-indene,
(b) 2,3-dihydro-1H-indene,
(c) 2,3-dihydro-benzofuran,
(d) 1,3-dihydro-isobenzofuran,
(e) 2,3-dihydro-benzothiofuran, and
(f) 1,3-dihydro-isobenzothiofuran,

or where R^3 and R^5 or R^4 and R^6 may be joined together to form a ring which is phenyl,

wherein the ring is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:

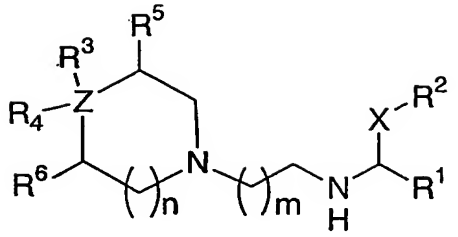
(a) halo,
(b) trifluoromethyl,
(c) hydroxy,
(d) C_{1-3}alkyl,
(e) -O-C_{1-3}alkyl,
(f) $-CO_2R^9$,
(g) -CN,
(h) $-NR^9R^{10}$, and
(i) $-CONR^9R^{10}$;

R^5 and R^6 are independently selected from:

(a) hydrogen,
(b) hydroxy,
(c) C_{1-6}alkyl,
(d) C_{1-6}alkyl-hydroxy,
(e) -O-C_{1-3}alkyl,
(f) oxo, and
(g) halo;

and pharmaceutically acceptable salts thereof and individual diastereomers thereof.

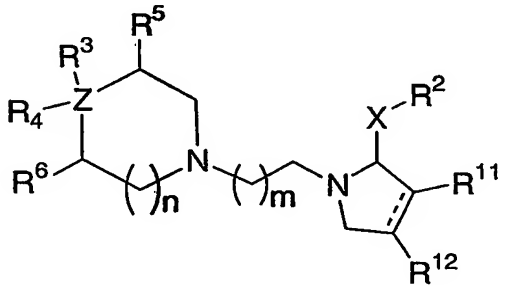
2. The compound of Claim 1 of the formula Ia:



Ia

and pharmaceutically acceptable salts and individual diastereomers thereof.

3. The compound of Claim 1 of the formula Ib:



Ib

wherein:

the dashed line represents a single or a double bond;

R^{11} is selected from:

(a) hydrogen
(b) C_{1-6}alkyl
(c) hydroxy,
(d) -O-C_{1-3}alkyl
(e) -Phenyl and heterocycle,
(f) -CO_2R^9,
(g) -CN,
(h) -NR^9R^{10}, and
(i) -$CONR^9R^{10}$;

R^{12} is selected from:

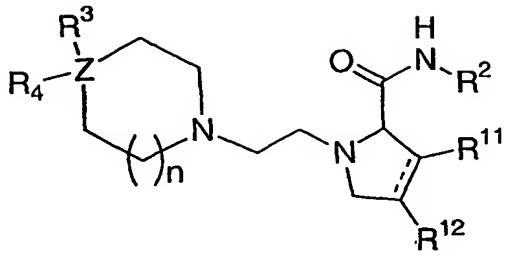
(a) hydrogen,
(b) hydroxy,
(c) C_{1-6}alkyl,
(d) C_{1-6}alkyl-hydroxy,
(e) -O-C_{1-3}alkyl,
(f) -CO_2R^9,
(g) -$CONR^9R^{10}$, and
(h) -CN;

or where R^{11} and R^{12} may be joined together to form a ring which is selected from:
(a) benzene,
(b) furan,
(c) thiophene,
(d) thiazole,
(e) C_{3-6}cycloalkyl

wherein the ring is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
(a) halo,
(b) trifluoromethyl,
(c) hydroxy,
(d) C_{1-3}alkyl,
(e) -O-C_{1-3}alkyl,
(f) -CO_2R^9,
(g) -CN,
(h) -NR^9R^{10}, and
(i) -$CONR^9R^{10}$;

and pharmaceutically acceptable salts and individual diastereomers thereof.

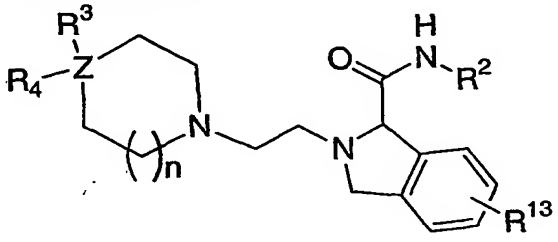
4. The compound of Claim 3 of the formula Id:



Id

and pharmaceutically acceptable salts and individual diastereomers thereof.

5. The compound of Claim 3 of the formula Ie:



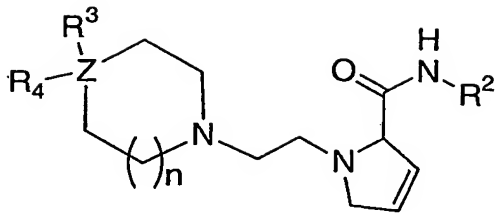
Ie

wherein R^{13} is independently selected from:

(a) hydrogen,
(b) halo,
(c) trifluoromethyl,
(d) fused C_{1-3}cycloalkyl
(e) C_{1-3}alkyl,
(f) -O-C_{1-3}alkyl,
(g) -CO_2H,
(h) -CO_2C_{1-3}alkyl, and
(i) -CN;

and pharmaceutically acceptable salts and individual diastereomers thereof.

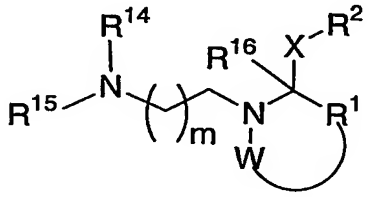
6. The compound of Claim 3 of the formula If:



If

and pharmaceutically acceptable salts and individual diastereomers thereof.

7. The compound of Claim 1 of the formula II:



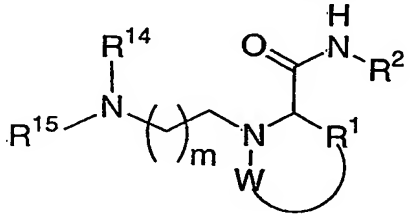
II

wherein R^{14}, R^{15}, R^{16} are independently selected from:

(a) hydrogen,
(b) -C_{1-6}alkyl
(c) -C_{1-6}cycloalkyl
(d) -C_{1-6}alkyl-phenyl
(e) -C_{1-6}alkyl-heterocylcle
(f) -C_{1-6}alkyl-C_{3-6}cycloakyl
(g) - C_{1-6}alkyl O-C_{1-6}alkyl,

and pharmaceutically acceptable salts and individual diastereomers thereof.

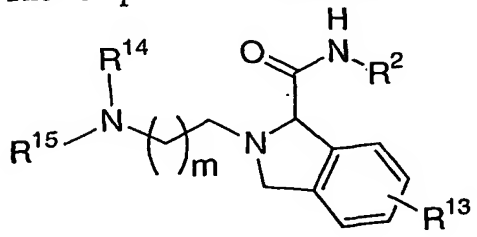
8. The compound of Claim 1 of the formula IIa:



IIa

and pharmaceutically acceptable salts and individual diastereomers thereof.

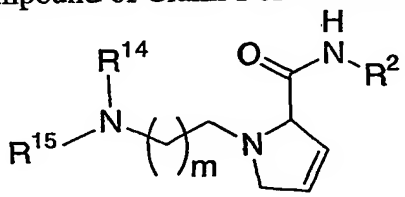
9. The compound of Claim 1 of the formula IIb:



IIb

and pharmaceutically acceptable salts and individual diastereomers thereof.

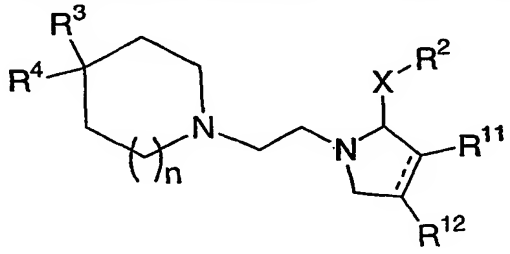
10. The compound of Claim 1 of the formula IIc:



IIc

and pharmaceutically acceptable salts and individual diastereomers thereof.

11. The compound of Claim 1 of the formula:



wherein:

the dashed line represents a single or a double bond,

R^{11} and R^{12} are hydrogen or where R^{11} and R^{12} may be joined together to form a ring which is selected from:

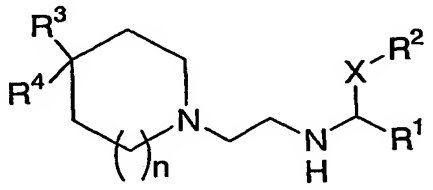
(a) benzene,

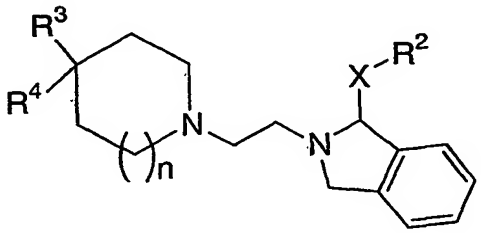
(b) heterocycle

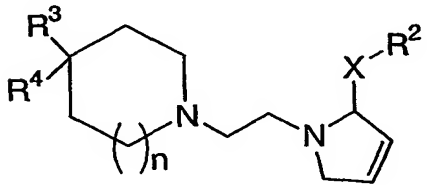
(c) C3-6cyclalkyl

and pharmaceutically acceptable salts and individual diastereomers thereof.

12. The compound of Claim 1 of the formula:







and pharmaceutically acceptable salts and individual diastereomers thereof.

13. The compound of Claim 1 wherein W is hydrogen or -CH_2-.

14. The compound of Claim 1 wherein X is -CONH-, phenyl or heterocycle.

15. The compound of Claim 1 wherein Z is -C- or -N-.

16. The compound of Claim 1 wherein n is 0 and 1.

17. The compound of Claim 1 wherein m is 1.

18. The compound of Claim 1 wherein heterocycle is selected from: furanyl, imidazolyl, oxadiazolyl, oxazolyl, pyrazolyl, pyrazinyl, pyridyl, pyridazinyl, pyrimidyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and triazolyl, and N-oxides thereof.

19. The compound of Claim 1 wherein -C_{1-6}alkyl, -C_{0-6}alkyl-O-C_{1-6}alkyl-, -C_{0-6}alkyl-S-C_{1-6}alkyl-, and -(C_{0-6}alkyl)-(C_{3-7}cycloalkyl)-(C_{0-6}alkyl),

where the alkyl and the cycloalkyl are unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:

(a) halo,
(b) hydroxy,
(c) -O-C_{1-3}alkyl,
(d) trifluoromethyl,
(f) C_{1-3}alkyl,
(g) -O-C_{1-3}alkyl,
(h) -CO_2R^9, wherein R^9 is independently selected from: hydrogen, C_{1-6} alkyl, C_{5-6} cycloalkyl, benzyl or phenyl, which is unsubstituted or substituted with 1-3 substituents where the substituents are independently selected from: halo, C_{1-3}alkyl, C_{1-3}alkoxy and trifluoromethyl,
(i) -CN,
(j) -NR^9R^{10}, and
(k) -$CONR^9R^{10}$.

20. The compound of Claim 1 wherein R^1 is selected from:

(1) -C_{1-6}alkyl, which is unsubstituted or substituted with 1-6 substituents where the substituents are independently selected from:
(a) halo,
(b) hydroxy,
(c) -O-C_{1-3}alkyl, and
(d) trifluoromethyl,
(2) -C_{0-6}alkyl-O-C_{1-6}alkyl-, which is unsubstituted or substituted with 1-6 substituents where the substituents are independently selected from:

(a) halo, and
(b) trifluoromethyl,

(3) -C_{0-6}alkyl-S-C_{1-6}alkyl-, which is unsubstituted or substituted with 1-6 substituents where the substituents are independently selected from:
(a) halo, and
(b) trifluoromethyl,

(4) -(C_{3-5}cycloalkyl)-(C_{0-6}alkyl), which is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
(a) halo,
(b) hydroxy,
(c) -O-C_{1-3}alkyl, and
(d) trifluoromethyl.

21. The compound of Claim 1 wherein R^1 is selected from:
(1) -CH_3,
(2) -CH_2CH_3,
(3) -$CH(CH_3)_2$,
(4) -$CH_2CH_2CH_3$,
(5) -$CH_2CH(CH_3)_2$,
(6) -cyclopropyl,
(7) -cyclobutyl,
(8) -cyclopentyl,
(9) -CH_2-cyclopropyl,
(10) -CH_2-cyclobutyl,
(11) -CH_2-cyclopentyl,
(12) -CH_2OH,
(13) -$C(CH_3)_2(OH)$,
(14) -$C(CH_2OH)(CH_3)_2$,
(15) -(OH)cyclobutyl,
(16) -(OH)cyclopentyl,
(17) -$C(CH_3)_2(NHCOCH_3)$,
(18) -$C(CO_2H)(CH_3)_2$,
(19) -O-CH_3,
(20) -O-cyclopentyl,

(21) -O-CH(CH3)2,
(22) -S-CH3,
(23) -S-CF3,
(24) -SO2-CH3,
(25) -S-CH(CH3)2,
(26) -SO2-CH(CH3)2, and
(27) -NH-SO2-CH3.

22. The compound of Claim 1 wherein R^2 is selected from -(C_{0-4}alkyl)-phenyl and -(C_{0-4}alkyl)-heterocycle,

where heterocycle is selected from:

furanyl, imidazolyl, oxadiazolyl, oxazolyl, pyrazolyl, pyrazinyl, pyridyl, pyridazinyl, pyrimidyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and triazolyl, and N-oxides thereof,

where the alkyl is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:

(a) halo,
(b) hydroxy,
(c) -O-C_{1-3}alkyl, and
(d) trifluoromethyl,

and where the phenyl or heterocycle is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:

(a) halo,
(b) trifluoromethyl,
(c) trifluoromethoxy,
(d) hydroxy,
(e) C_{1-3}alkyl,
(f) -O-C_{1-3}alkyl,
(g) -CO_2R^9,
(h) -S-C_{1-3}alkyl,
(i) -SO_2-C_{1-3}alkyl,
(j) -SCF_3,
(k) -CO_2R^9,
(l) -NR^9R^{10},

(m) $-NR^9-SO_2-R^{10}$,
(n) $-SO_2-NR^9R^{10}$, and
(o) $-CONR^9R^{10}$.

23. The compound of Claim 1 wherein R^2 is selected from $-(C_{0-4}alkyl)$-phenyl and $-(C_{0-4}alkyl)$-heterocycle,

where heterocycle is selected from: pyridyl, pyridazinyl, and N-oxides thereof,

where the alkyl is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:

(a) halo,
(b) hydroxy,
(c) $-O-C_{1-3}alkyl$, and
(d) trifluoromethyl,

and where the phenyl or heterocycle is unsubstituted or substituted with 1-3 substituents where the substituents are independently selected from:

(a) halo,
(b) trifluoromethyl,
(c) trifluoromethoxy,
(d) hydroxy,
(e) $C_{1-3}alkyl$,
(f) $-O-C_{1-3}alkyl$,
(g) $-CO_2-C_{1-3}alkyl$,
(h) $-CO_2H$,
(i) $-S-C_{1-3}alkyl$,
(j) $-SO_2-C_{1-3}alkyl$,
(k) $-SCF_3$,
(l) $-NH_2$,
(m) $-NH-SO_2-C_{1-3}alkyl$, and
(n) $-SO_2-NH_2$.

24. The compound of Claim 1 wherein R^2 is selected from $-CH_2$-phenyl and $-CH_2$-heterocycle,

where heterocycle is selected from: pyridyl, pyridazinyl, and N-oxides thereof,

and where the phenyl or heterocycle is unsubstituted or substituted with 1-3 substituents where the substituents are independently selected from:

(a) halo,
(b) trifluoromethyl,
(c) trifluoromethoxy,
(d) hydroxy,
(e) C_{1-3}alkyl,
(f) -O-C_{1-3}alkyl,
(g) -CO_2-C_{1-3}alkyl,
(h) -CO_2H,
(i) -S-C_{1-3}alkyl,
(j) -SO_2-C_{1-3}alkyl,
(k) -SCF_3,
(l) -NH_2,
(m) -NH-SO_2-C_{1-3}alkyl, and
(n) -SO_2-NH_2.

25. The compound of Claim 1 wherein R^2 is selected from:

(1) -CH_2-(phenyl),
(2) -CH_2-(4-bromophenyl),
(3) -CH_2-(3-chlorophenyl),
(4) -CH_2-(3,5-difluorophenyl),
(5) -CH_2-((2-trifluoromethyl)phenyl),
(6) -CH_2-((3-trifluoromethyl)phenyl),
(7) -CH_2-((4-trifluoromethyl)phenyl),
(8) -CH_2-((3-trifluoromethoxy)phenyl),
(9) -CH_2-((3-trifluoromethylthio)phenyl),
(10) -CH_2-((3-trifluoromethoxy-5-thiomethyl)phenyl),
(11) -CH_2-((3-trifluoromethoxy-5-methoxy)phenyl),
(12) -CH_2-((3-trifluoromethoxy-5-methanesulfonyl)phenyl),
(13) -CH_2-((3-trifluoromethoxy-5-amino)phenyl),
(14) -CH_2-((3-trifluoromethoxy-5-aminomethanesulfonyl)phenyl),
(15) -CH_2-((3-trifluoromethoxy-5-sulfonylamino)phenyl),
(16) -CH_2-((3,5-bis-trifluoromethyl)phenyl),

(17) -CH_2-((3-fluoro-5-trifluoromethyl)phenyl),
(18) -$CH(CH_3)$-((3,5-bis-trifluoromethyl)phenyl),
(19) -$C(CH_3)_2$-((3,5-bis-trifluoromethyl)phenyl),
(20) -CH_2-(4-(2-trifluoromethyl)pyridyl),
(21) -CH_2-(5-(3-trifluoromethyl)pyridyl),
(22) -CH_2-(5-(3-trifluoromethyl)pyridazinyl),
(23) -CH_2-(4-(2-trifluoromethyl)pyridyl-N-oxide), and
(24) -CH_2-(5-(3-trifluoromethyl)pyridyl-N-oxide).

26. The compound of Claim 1 wherein R^3 is hydrogen and phenyl, where the phenyl is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:

(a) halo,
(b) trifluoromethyl,
(c) hydroxy,
(d) C_{1-3}alkyl,
(e) -O-C_{1-3}alkyl,
(f) -CO_2R^9,
(g) -CN,
(h) -NR^9R^{10}, and
(i) -$CONR^9R^{10}$.

27. The compound of Claim 1 wherein R^3 is hydrogen and phenyl, where the phenyl is unsubstituted or substituted with 1-3 substituents where the substituents are independently selected from:

(a) halo,
(c) hydroxy,
(d) C_{1-3}alkyl,
(e) -O-C_{1-3}alkyl, and
(f) -CO_2R^9.

28. The compound of Claim 1 wherein R^3 is phenyl, or para-fluorophenyl.

29. The compound of Claim 1 wherein R^4 is selected from:

(a) hydrogen,

(b) hydroxy,

(c) $-CO_2H$,

(d) $-CO_2C_{1-6}$alkyl, and

(e) -CN.

30. The compound of Claim 1 wherein R^5 and R^6 are independently selected from:

(a) hydrogen,

(b) hydroxy,

(c) $-CH_3$,

(d) $-O-CH_3$, and

(e) oxo.

31. A compound which is selected from the group consisting of the title compounds of the Examples, and pharmaceutically acceptable salts and individual diastereomers thereof.

32. A pharmaceutical composition which comprises an inert carrier and a compound of Claim 1.

33. A method for modulation of chemokine receptor activity in a mammal in need thereof which comprises the administration of an effective amount of the compound of Claim 1.

34. A method for treating, ameliorating or controlling an inflammatory or immunoregulatory disorder or disease which comprises administering to a patient in need thereof an effective amount of the compound of Claim 1.

35. A method for reducing the risk of an inflammatory or immunoregulatory disorder or disease which comprises administering to a patient in need thereof an effective amount of the compound of Claim 1.

36. A method for treating, ameliorating or controlling rheumatoid arthritis which comprises administering to a patient in need thereof an effective amount of the compound of Claim 1.